

ABSTRACT

A readily relocatable X-ray imaging system for inspecting the contents of vehicles and containers, and a method for using the same. In a preferred embodiment, the system is relatively small in size, and is used for inspecting commercial vehicles, cargo
5 containers, and other large objects. The X-ray imaging system comprises a substantially arch-shaped collapsible frame having an X-ray source and detectors disposed thereon. The frame is preferably collapsible via a plurality of hinges disposed thereon. A deployment means may be attached to the frame for deploying the frame into an X-ray imaging position, and for collapsing the frame into a transport position.

10 The collapsible X-ray frame may remain stationary during X-ray imaging while a vehicle or container is driven through or towed through an inspection area defined under the frame. Alternatively, the collapsible X-ray frame may be movable relative to a stationary vehicle or container during X-ray imaging.